

Enterprise Innovation

MIKE FISTER

Senior Vice President, General Manager,
Enterprise Platforms Group



**What does the enterprise IA
ecosystem do best?**

Very Large Scale *Innovation*

VLSI

Turning Innovation into Mainstream Technology



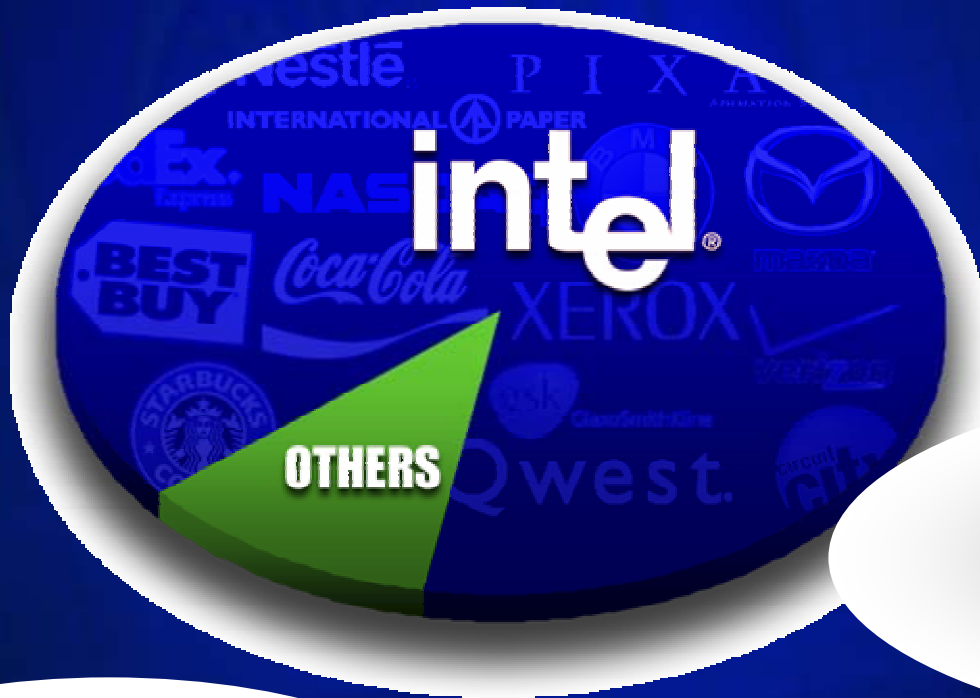
Xeon™ Processor Family



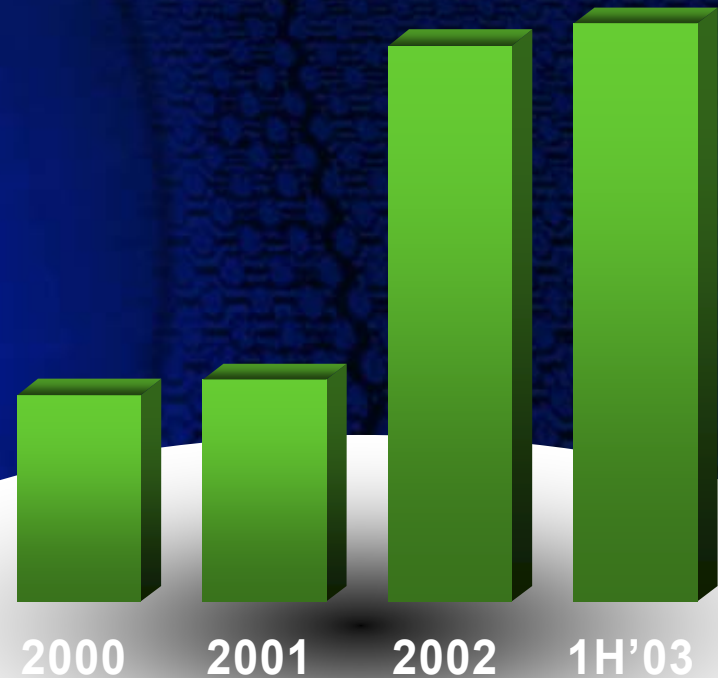
intel.

Proven Enterprise Technology

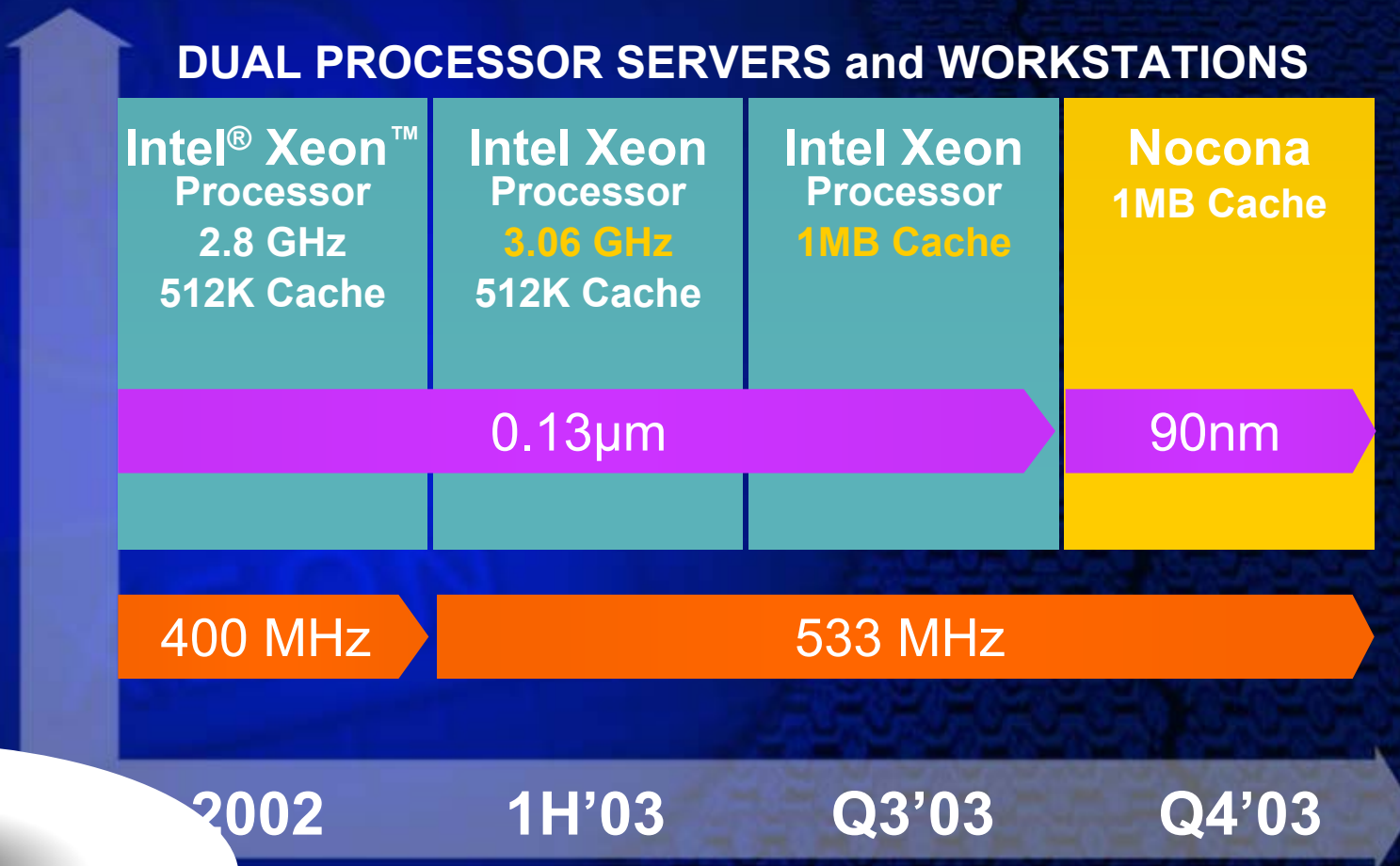
Server System Segment Share



Intel® Xeon™ Processor Shipments



A Stable Platform for Continued Innovation



† All dates specified are target dates, are provided for planning purposes only and are subject to change.

video

EXTRADE

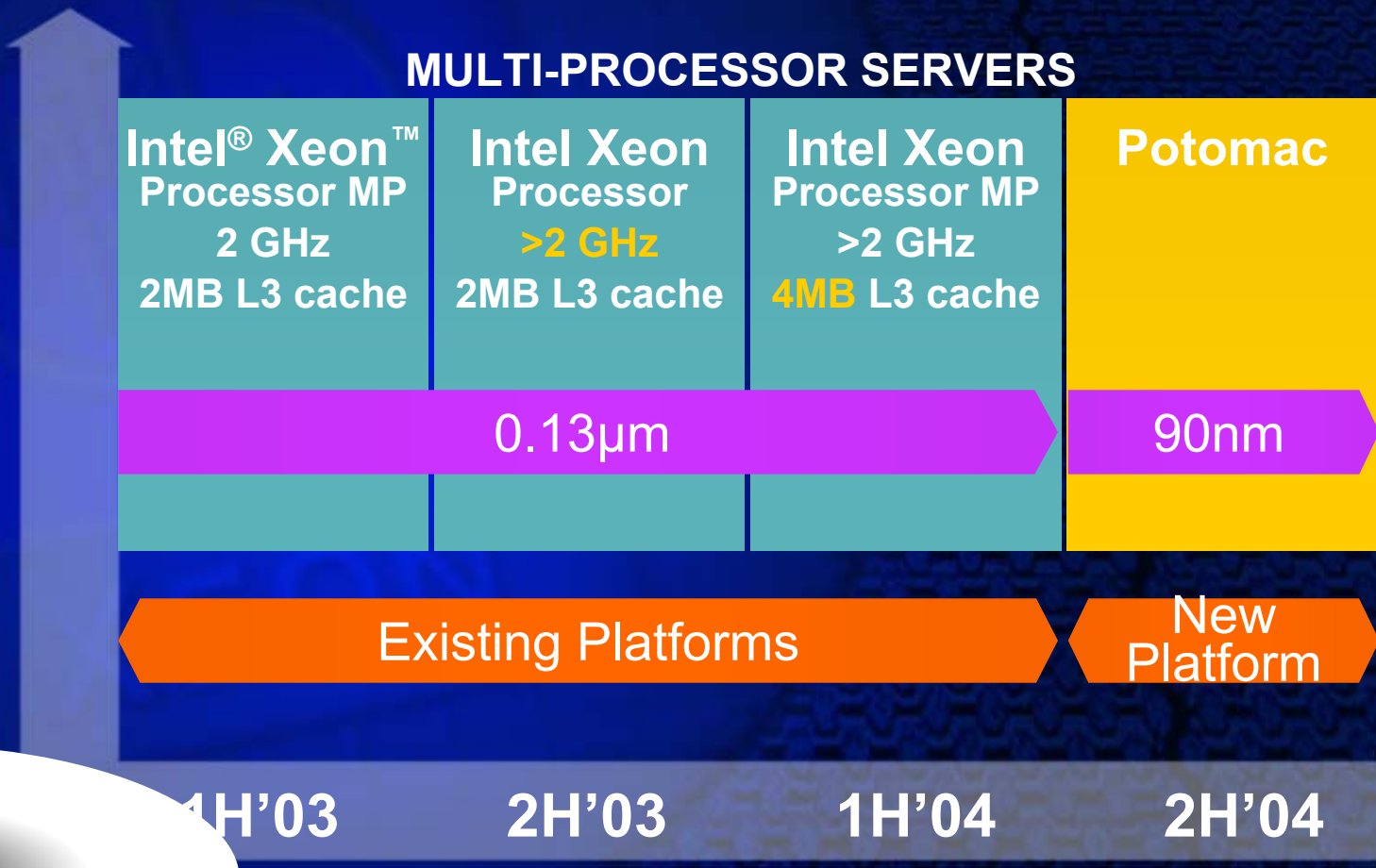
intel.

2002 – Year of Big Iron IA-32



intel.

Continued Investment in Larger Scale IA-32



demo



intel.

Itanium® Architecture



intel.

Architecture Momentum

Business Line (The Hindu), December, 2002

**HP sees Itanium as
choice of the future**



AP Newswires, June, 2002

**Compaq abandons high-end
chip in favor of Intel**

COMPAQ

InfoWorld Daily News, November, 2002

**IBM Itanium 2 servers
appear in massive
NCSA cluster**



CNET News.com, November, 2002

**Dell to produce
Itanium 2 computers**



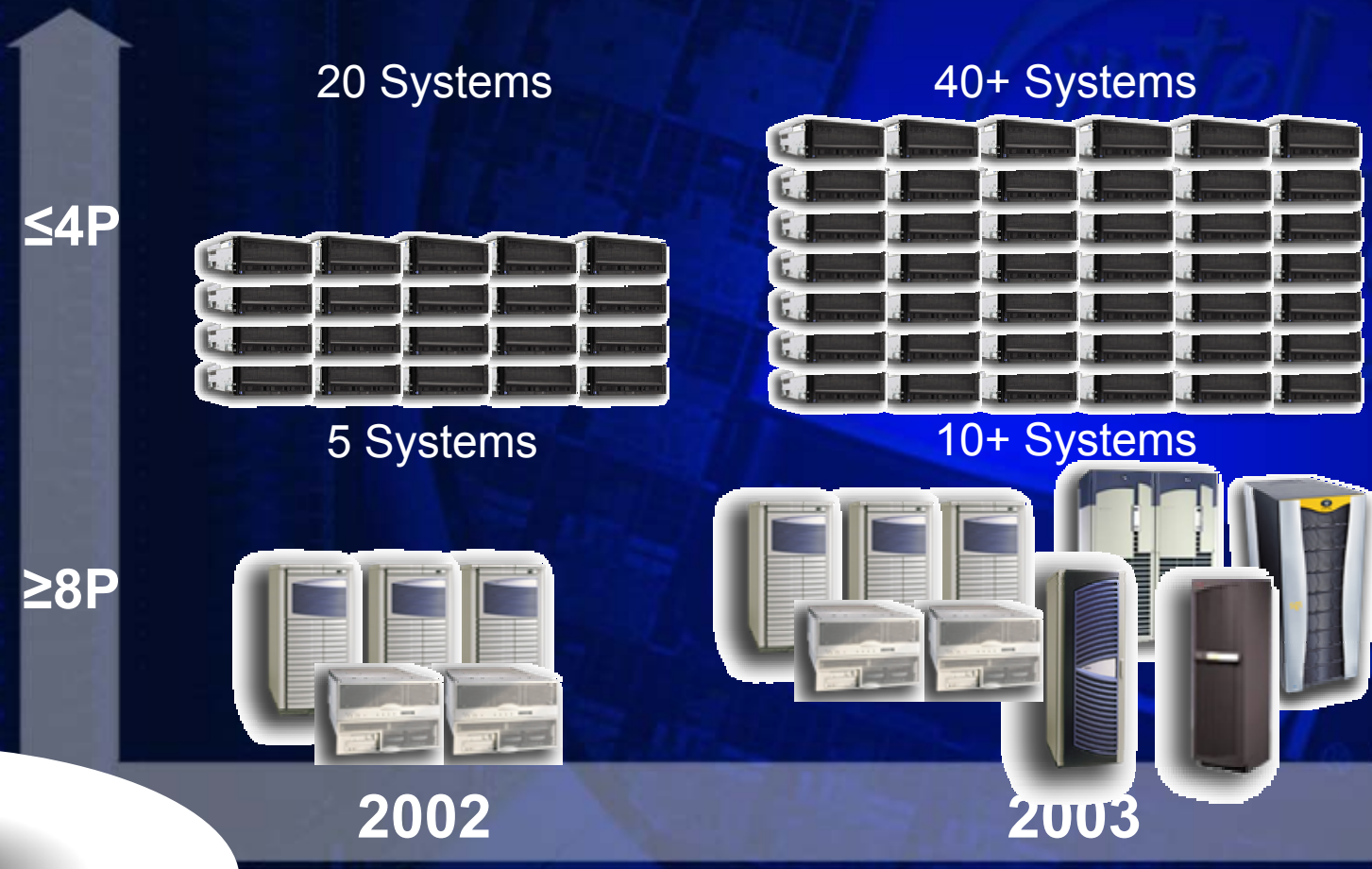
ZDNet, January, 2003

**Sun ally Fujitsu
cuts deal with Intel**

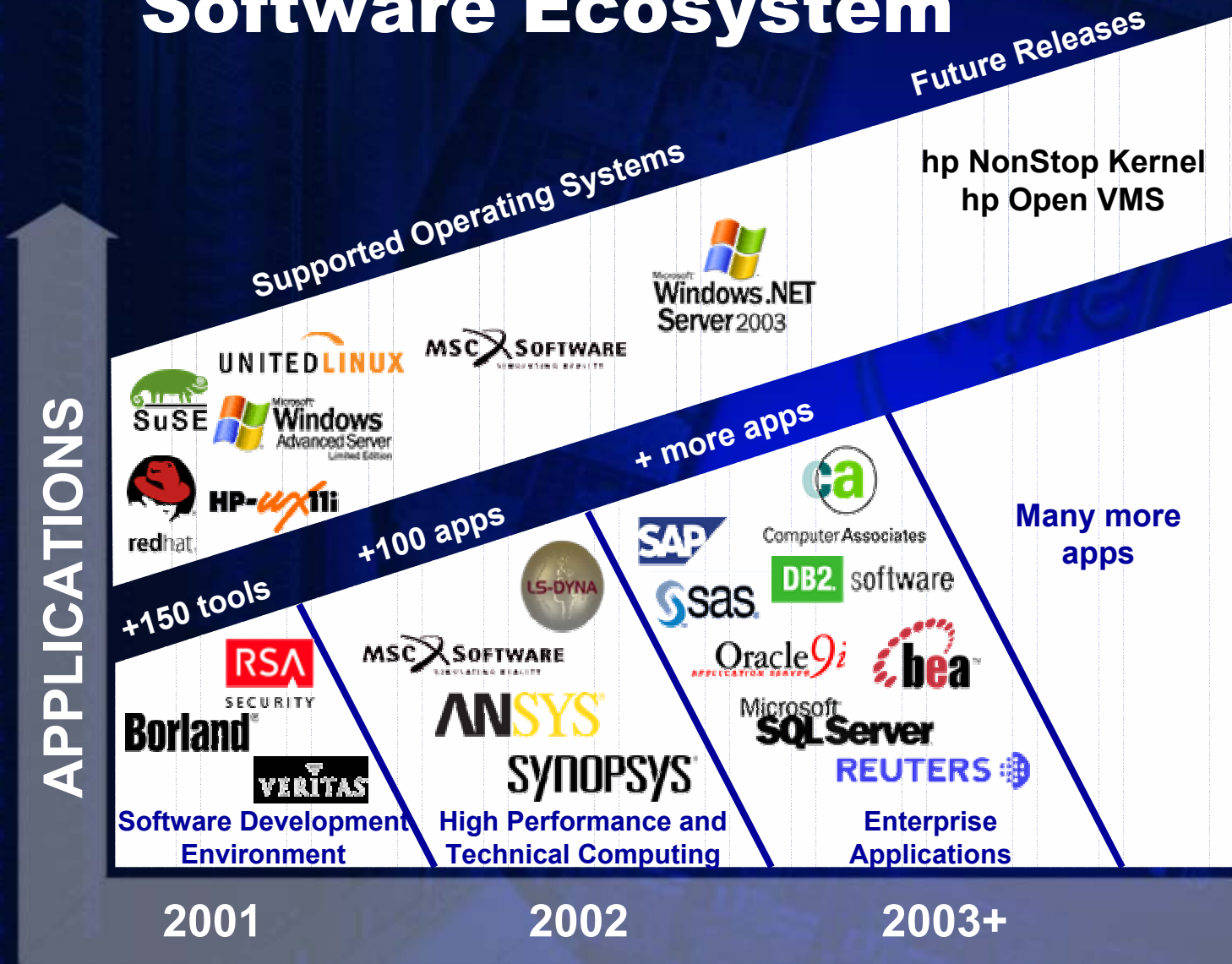
FUJITSU

intel.

Broadening Itanium® Architecture Platforms



Building a Robust Software Ecosystem



Driving End-user Momentum

DEPLOYMENTS

ENTERPRISE APPLICATIONS



WELLS
FARGO

TECHNICAL COMPUTING APPLICATIONS



ChevronTexaco



HIGH PERFORMANCE COMPUTING



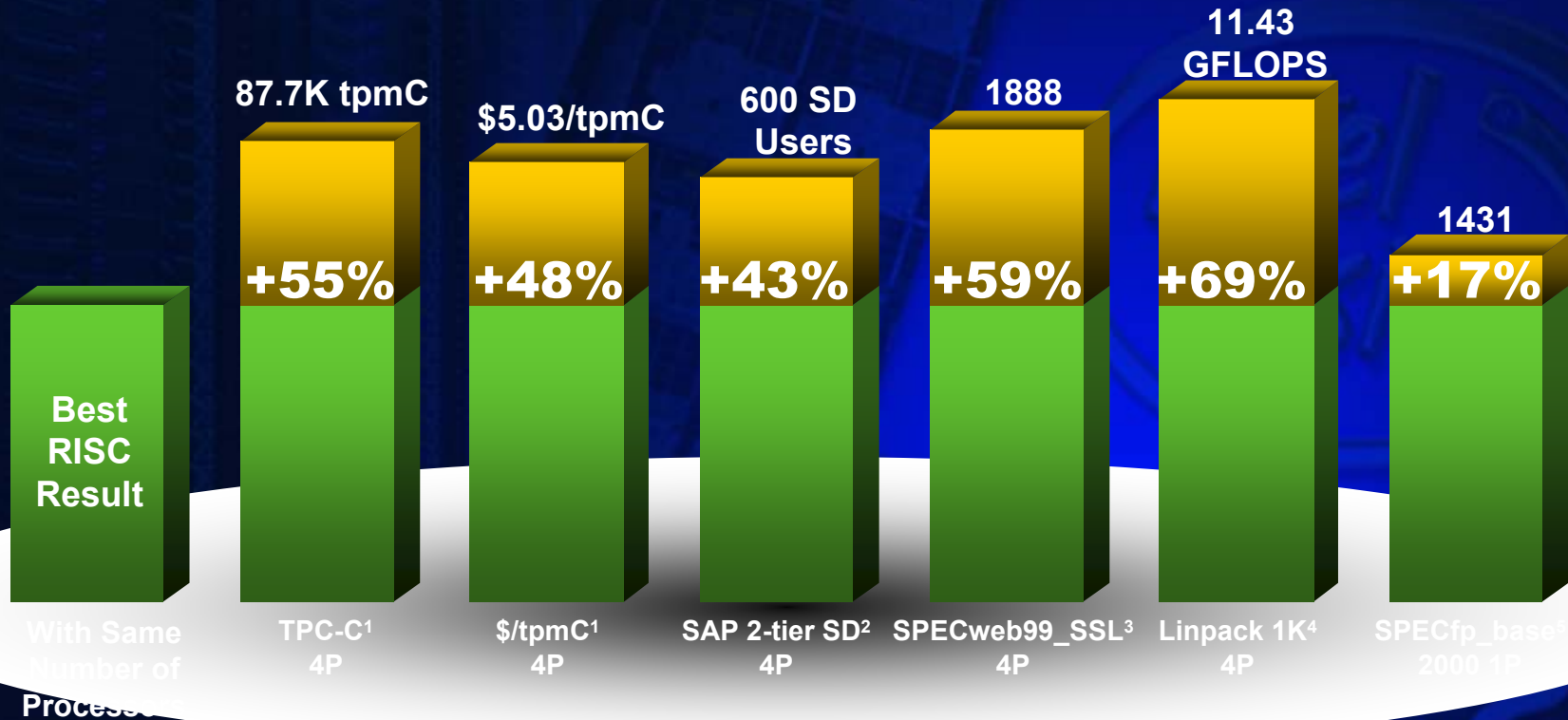
Pacific Northwest National Laboratory

2002

2003

intel.

Industry Leading Performance Results



¹ www.tpc.org: Itanium® 2 processor results on HP Server rx5670 using 4 Itanium® 2 processors 1GHz with 3MB L3 cache, 48GB memory, SQL Svr on .NET, \$5.03 price/tpmC, availability date 2/12/03. Alpha results of 44 price/tpmC on HP AlphaServer using 4 ES45 processors 1.25GHz, 32GB memory, availability 09/27/02.

² Source: SAP benchmark results measured on HP Server rx5670 using 4 Itanium® 2 processors 1GHz with integrated 3MB L3 cache, 24GB of memory, HP-UX 11i, SAP rev 4.6 C, Oracle 9i. Best RISC result of 420 from Model 1100 on AlphaServer ES45 1000MHz.

³ Source: SPECweb99 results measured on HP Server rx5670 using 4 Itanium® 2 processors 1GHz with 3MB L3 cache, 16GB memory, HP-UX, availability 9/02. PA-RISC result on HP Server rp5470 using 4 PA-8700 processors 1GHz with 3MB L3 cache, 16GB memory, HP-UX, availability 8/02.

⁴ Source: Linpack results measured on HP Server rx5670 using 4 Itanium® 2 processors 1GHz with 3MB L3 cache, HP UX. Power 4 result of 6769 on IBM eServer P630 using 4 Power 4 processors 1GHz.

⁵ Source: SPECfp results measured on HP Server rx5670 using 4 Itanium® 2 processor 1GHz with 3MB L3 cache, 6GB memory, RH Linux 2.1, HW availability 9/02. Power 4+ result of 1221 on IBM eServer P650 Model 1100 using 4 Power 4 processors 1.450MHz, 8GB, availability 12/02.

Results are approximate. Performance tests and ratings are measured using specific computer systems and/or components and reflect the approximate performance of Intel products as measured by those tests. Any difference in test methodology, hardware design or configuration may affect actual performance. Buyers should consult other sources of information to evaluate the performance of systems or components they are considering purchasing. For more information on performance tests and on the performance of Intel products, reference www.intel.com/proc/perf/limits.htm or call (U.S.) 1-800-628-8686 or 1-916-356-3104.



Announcing Today #1 Non-clustered 32-way Result

NEC Express5800/1320Xc

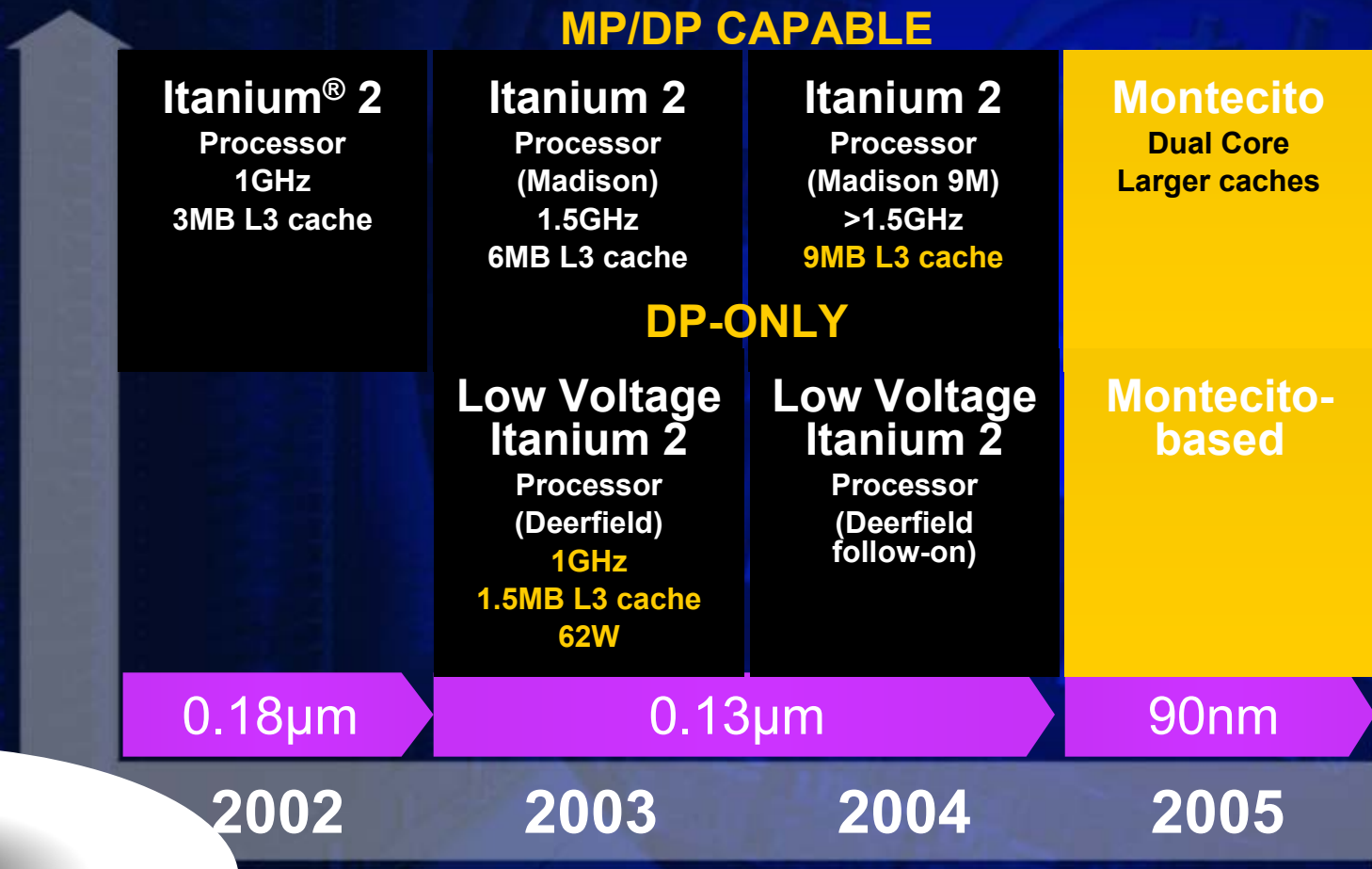
433.1K tpmC



NEC

Microsoft

Maintaining World Class Performance



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i n v e n t

SCOTT STALLARD

Senior Vice President,
General Manager
Business Critical Systems
Hewlett Packard

The Intel logo, consisting of the word 'intel.' in a lowercase, sans-serif font, positioned inside a white oval shape in the bottom left corner of the slide.

intel.

PCI Express



intel.

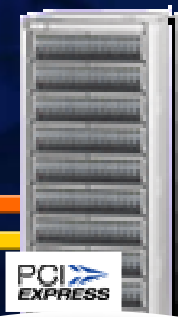
PCI Express

CLIENTS

NETWORKING

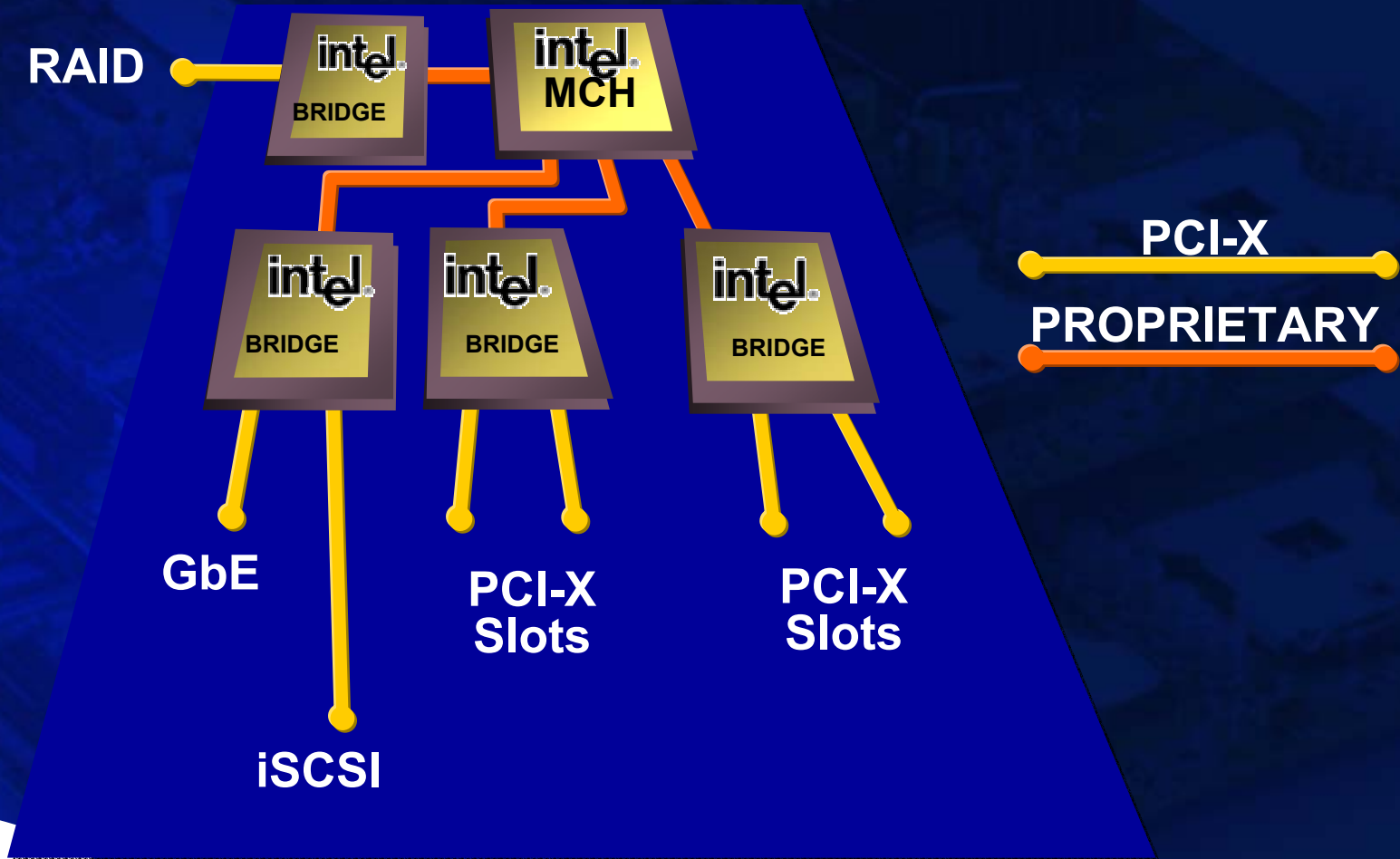
SERVERS

STORAGE



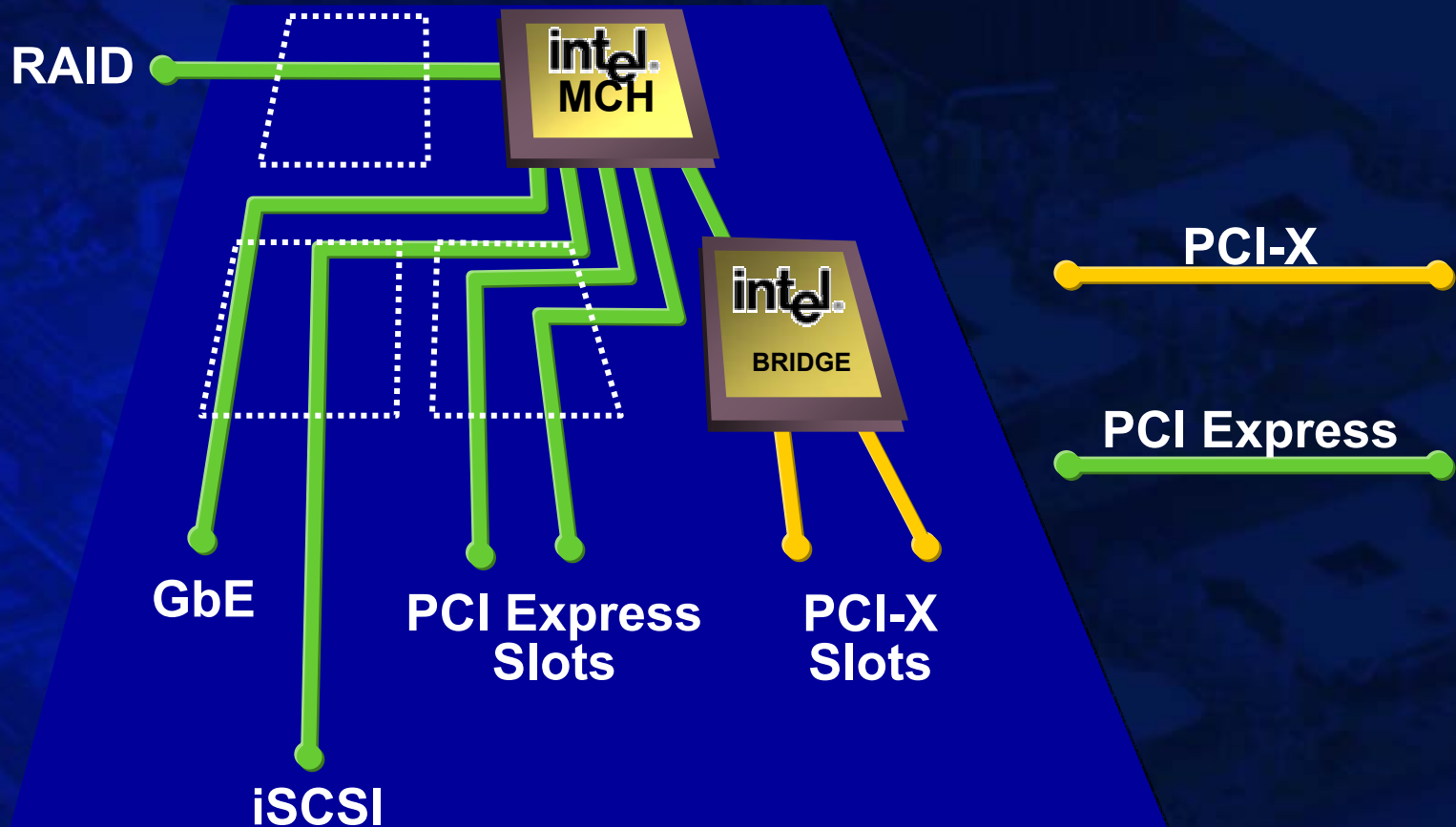
intel.

Today

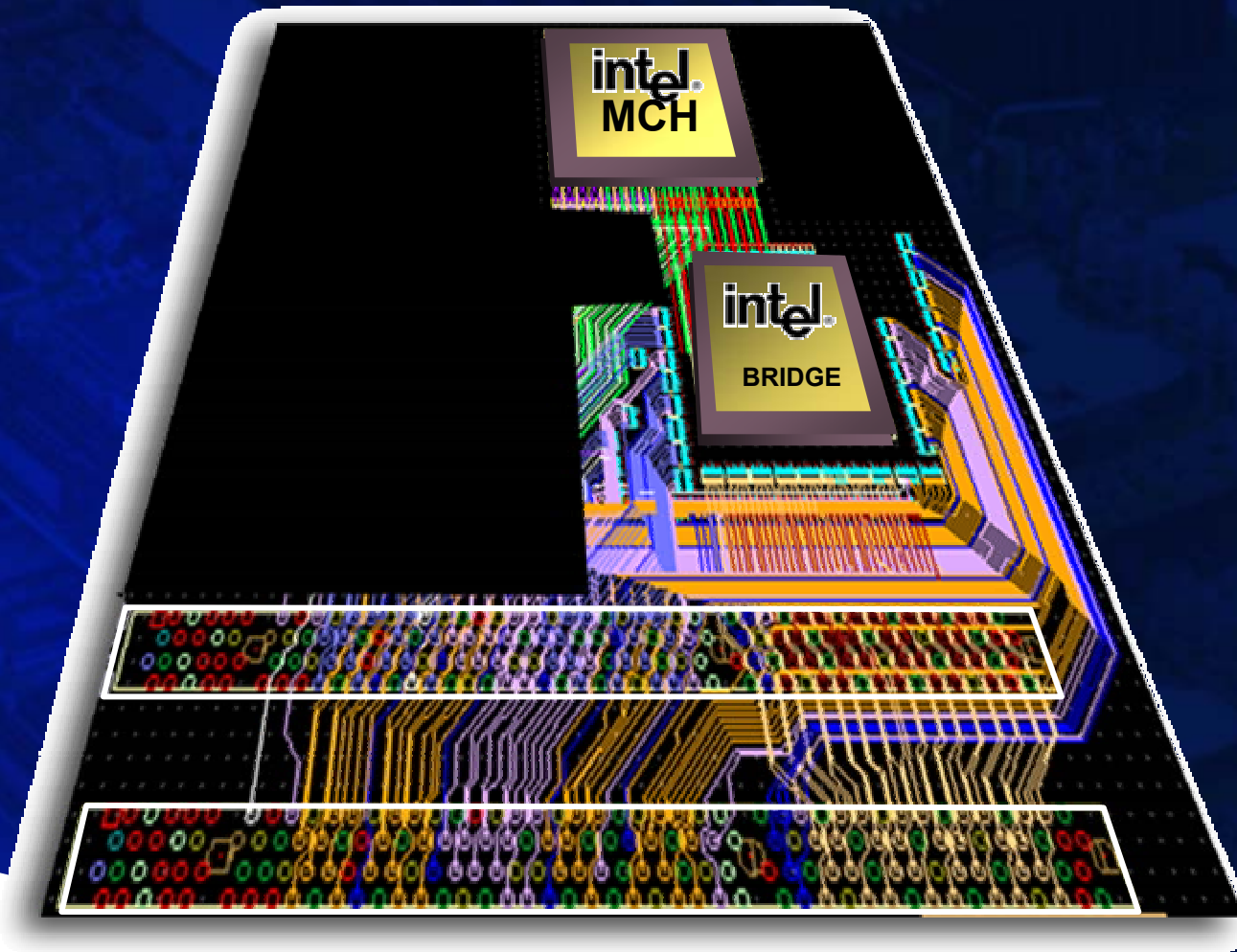


2004

Lower Cost Platforms



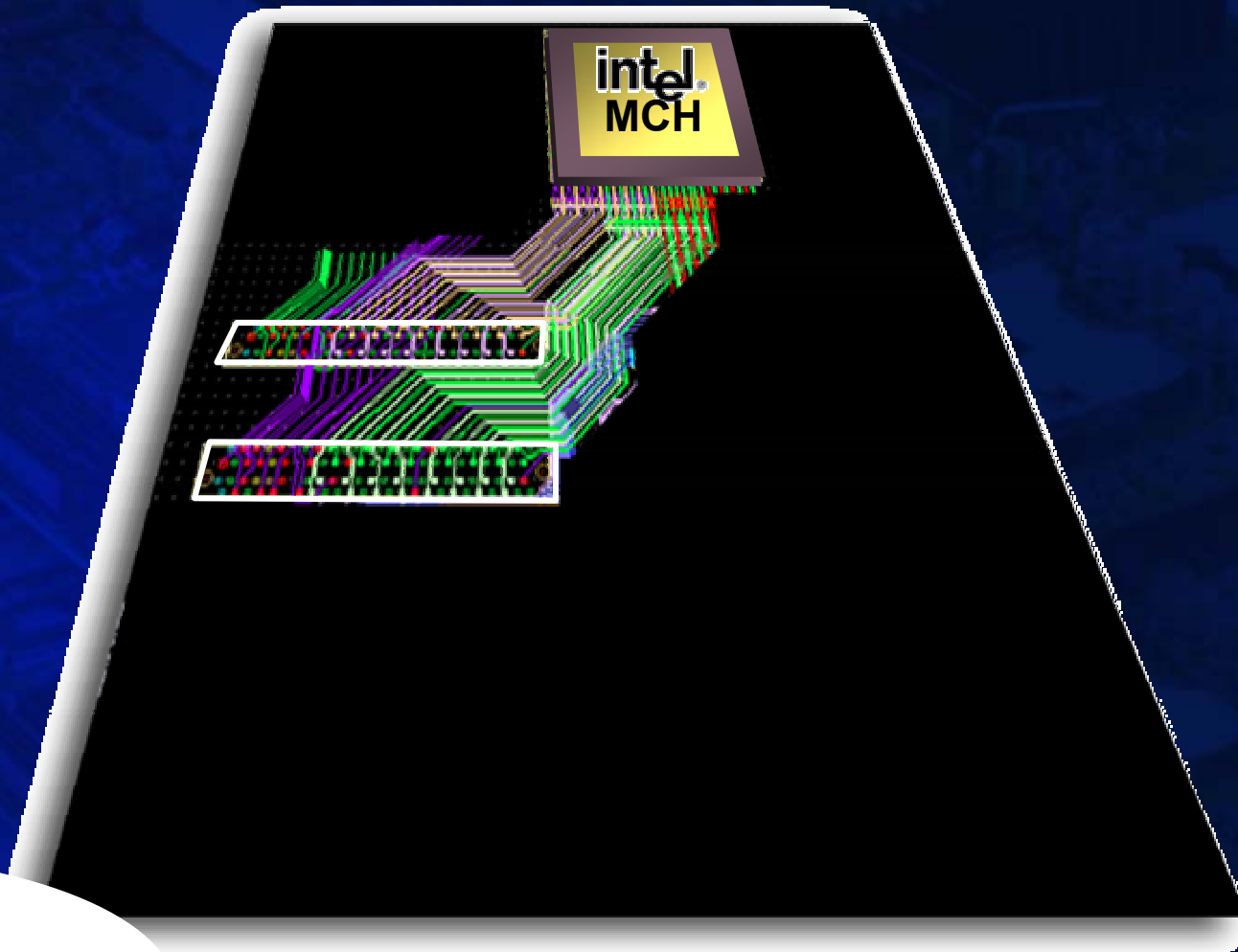
PCI-X Routing



2 PCI-X 64b Slots

PCI Express Routing

Board Area Reduced by 53%

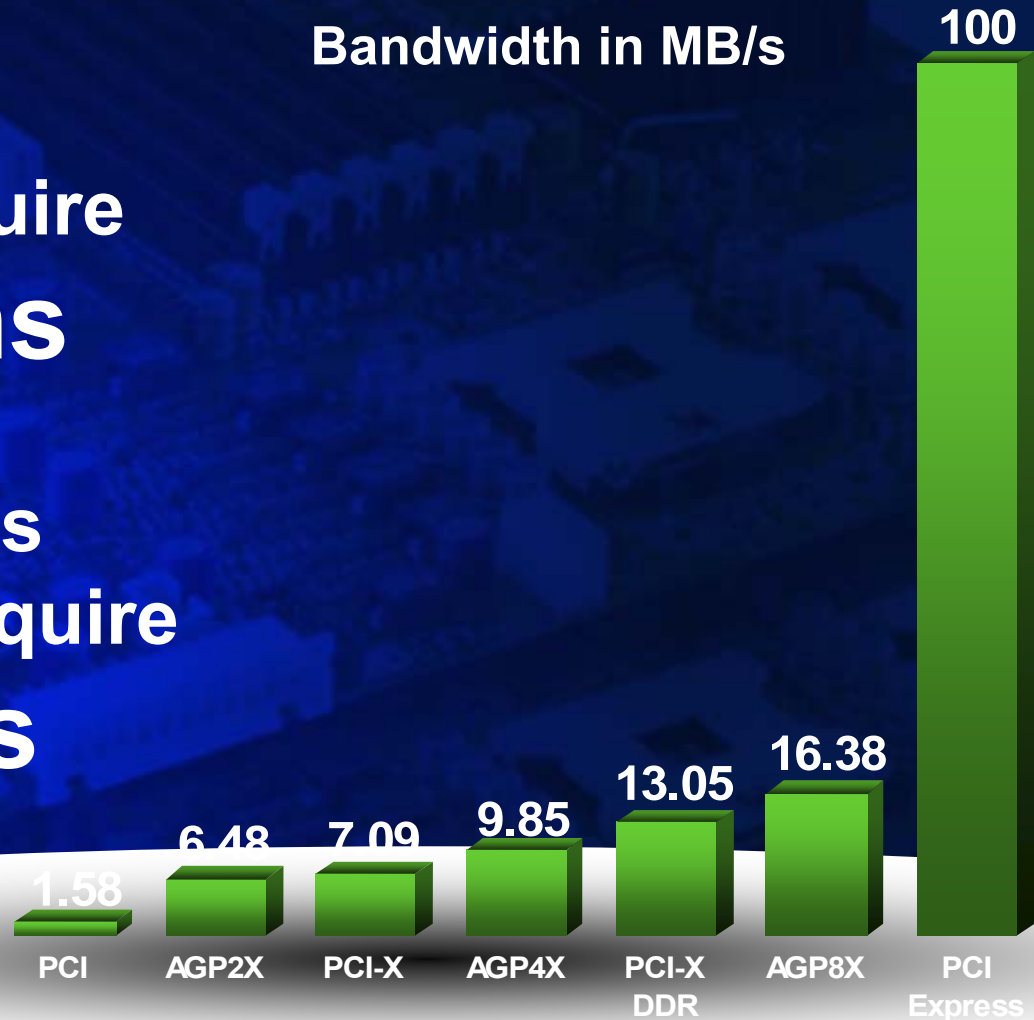


2 PCI Express x8 Slots

Higher Bandwidth per Pin

6 PCI-X
Segments Require
>1000 Pins

6 PCI Express
x8 Segments Require
~400 Pins



demo

intel.





intel.

Enterprise I/O Going Serial



Enterprise Aligned for PCI Express

Networking		Kenai II	Cranbrook	PCI EXPRESS
Storage		Intel® IOP321 I/O Processor	Dual Northway	PCI EXPRESS
	8P+	Intel 8870 Chipset with Switch		
	4P	Intel 8870 Chipset		
	DP	NEW SEGMENT Intel 8870 Chipset		
	4P		NEW SEGMENT Twincastle	PCI EXPRESS
	DP	Intel 7501 Chipset	Lindenhurst	PCI EXPRESS
	WS	Intel 7505 Chipset	Future	PCI EXPRESS
Entry WS		Intel 7205 Chipset	Canterwood	
		2002	2003	2004



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WETA



MAINSTREAM
ADOPTION

TECHNICAL
INNOVATION

VLSI

INDUSTRY MOMENTUM



Pacific Northwest National Laboratory

